"THE TRUTH DOESN'T ALWAYS MAKE A GOOD STORY, DOES IT?"[1]

An unlikely friendship originated in the 1920s. On one side, Sir Arthur Conan Doyle, the creator of the character Sherlock Holmes, the logical detective and the ultimate representative of Aristotelian empiricism in modern literature. On the opposite side, the great magician Harry Houdini, who at the time became one of the prominent celebrities in show business for his ability to escape from glass coffins with his body upside down and submerged in water. An improbable pair - the refined Scottish gentleman alongside the self-taught American Jewish immigrant[2].

Spiritualism forged a bond between the two. The philosophical and religious doctrine gained popularity during this period as a result of World War I, which caused a significant number of deaths and left many people eager for a link with the afterlife. Doyle, shortly after the traumatic loss of a son and a young brother due to the war, became an ardent researcher of spiritualism. His fascination with the supernatural turned into an obsession.

Houdini met Doyle during one of his tours in Europe, and they quickly formed a fraternal friendship. Although the illusionist was not a follower of spiritualism, he had a great interest in the subject, stemming from a desire to connect with his deceased mother. The pair visited some of the best European mediums of that time. At first, Houdini seemed genuinely open to the idea but still undecided about the feasibility of divine contacts. However, as the magician began to uncover certain tricks used by the mediums, his doubt faded. He initially controlled his impulse and did not expose the frauds, but started a growing process of frustration and disgust at realizing that they were taking advantage of people's beliefs.

After some time, Houdini decided to embark on a crusade to expose fraudulent mediums. At this point, Doyle supported him, fearing that charlatans would affect the religion's credibility. But then, Doyle began to point to the magician himself as one of the notable mediums of the time, clearly confusing his famous tricks with a supernatural ability to dematerialize. At a certain point, the contrast between their personalities became quite strange. While one obsessively focused on proving immortality, the other sharpened his cynicism and was driven to the point of consenting to reveal his tricks to demonstrate the impossibility of some allegedly mediumistic work.

In a final attempt to prove that certain phenomena were nothing but tricks, Houdini invited Doyle to a mediumistic meeting at his home in New York[3]. The friends gathered in the magician's library with a blackboard, five cork balls, and some white paint. Houdini extended the blackboard for Doyle's inspection. Then, he asked for the blackboard to be suspended in the middle of the library by wires and hooks, so that it was distant from any objects and eliminated the possibility of electrical connections. Finally, the magician asked Doyle to secure the hooks with some object to hold them firmly. At that very moment, he chooses the edge of a picture frame on one side and on the other side, a heavy book from the shelf. Now it's time to choose one of the four cork balls as proof that they were not specially prepared. The selected ball is cut in half, proving it to be a solid and ordinary ball. Another ball is chosen, and it is placed inside a saucer containing white paint, where it is immediately coated with the liquid.

At this point, a piece of paper and a pencil are handed to Doyle with instructions to walk a few blocks and write a message of his choice. The writer crosses some streets, arrives at Central Park, writes a message on the paper, folds

[1] Lev Grossman, American novelist and literary critic, author of several books about magic
[2] Harry Houdini's original name was Ehrich Weisz, born in Budapest and the son of a rabbi
[3] Both are accompanied by the president of the American Association of Magic, who recounts this event in his memoirs

it, puts it in his pocket, and starts the way back. Upon returning to the library, Houdini initially invites his friend to hold the spoon and remove the ink-soaked ball, then place it on the left side of the blackboard. The ball soon appears to stick seemingly on its own, but then it starts rolling, leaving a trail. When it falls to the floor, the trail appears to form a phrase: "Mene, mene, tekel upharsin"[4]. These are the exact words that Doyle recorded on his small piece of paper. Doyle cannot contain his look of astonishment, oscillating between admiration and disbelief. There were no doubts left, his conviction only grew stronger - Houdini was a powerful medium.

The secret of the trick remained a mystery for decades and was the subject of research by various magicians[5] and historians. It was a trick partly performed by Max Berol, a magician close to Houdini from Europe, adding techniques already developed and presented by the magician himself. Behind the wall of Houdini's library, in an adjacent room, an assistant positioned himself next to a small hole in a panel. Holding a small rod with a magnet on its tip, he could control the cork ball, which had been swapped out when Doyle left to write the note, for a ball with an iron core. When Doyle returned to the library, Houdini made sure to check if the piece of paper with the written phrase was really folded and immediately returned it to his friend. But in reality, in a fraction of a second, the magician switched the papers. Without realizing, Doyle ended up holding a blank piece of paper. While Doyle focused on moving the ink-soaked ball, supposedly cork, toward the blackboard, Houdini took the opportunity to read the words written on the paper. He then used his famous secret communication code developed for his performances. He initiated what seemed to be a light and casual conversation with Doyle, but each carefully picked word mapped through the secret code onto the pre-discovered sentence, so that his assistant could decipher the true phrase and guide the ball with the magnet to write it on the blackboard[6]. As soon as the message was scribbled on the board, Houdini asked Doyle for the stored paper, calmly unfolded the blank paper that had been previously exchanged, ceremoniously read the sentence aloud, and skillfully switched the papers back, thus returning the original paper to his friend.

Doyle carried an unwavering belief that Houdini had achieved such a feat through psychic assistance. No one was able to dissuade him. Houdini admitted that it was a trick he had worked on throughout the winter. Although he did not reveal the illusionist technique applied, he reinforced his intention to shed light on the risk of trusting what is seen as supernatural or the work of spirits solely because it cannot be explained.

"ACTING IS ALL ABOUT HONESTY. IF YOU CAN FAKE THAT, YOU'VE GOT IT MADE"[7]

Magic is the theatrical art of making us see what does not exist. Theater, at its essence, seeks to control the audience's attention, manipulating its viewers by inducing what they should see, but above all, what lies beyond their sight.

The human brain operates based on incomplete information and is thus susceptible to systematic errors. There is no reality, only perception. A good magician takes advantage of these blank spaces to make the ordinary appear impossible.

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[4] According to the Old Testament, these are the words that appeared on the wall during Belshazzar's celebration and were interpreted as "God has condemned the kingdom of Belshazzar

[5] The trick was finally revealed in Bob Loomis's book - "Houdini's Final Incredible Secret: How Houdini Mystified Sherlock Holmes' Creator."

[6] To understand the Houdini code - https://bit.ly/houdini_code

[7] George Burns, stage name of Nathan Birnbaum, American actor and writer

Metacognitive illusions follow similar patterns and unfold when people hold mistaken beliefs about their own cognitive systems. They draw from the same source as visual illusions but have our own brain as the inducing magician. It is a futile struggle given that we consider ourselves knowledgeable about our perception and memory; after all, we understand and remember events most of the time. Unfortunately, our intuition about our own cognitive systems may not be sufficiently reliable. Human memory approaches a reconstructive organization rather than a reproductive one[8]. An event is not just a mental recording but a process of composing a story. The simple act of incorporating small imaginary elements into our memories already irreversibly affects the recollection of the fact.

At this point, the ego can be a critical component. Narcissistic exaggeration imprisons thought around its own truth, deflects self-criticism, and repels learning. Freud mentions three crucial moments when humans were stripped of their excessively grandiose and omnipotent image: science - or "pseudoscience" for critics - undertaking its challenging mission to reveal to humans their cosmic insignificance. The first narcissistic wound arises from modern astronomy and Copernicus's studies, symbolically placing humanity no longer at the center of the universe. The second wound is inflicted by Darwin when he frames humans as part of an evolutionary process of species, just like any other animal. The third, catalyzed by Freud's reflection, hits at the heart of our philosophical musings, removing the pedestal idea that humans have absolute control over their minds. The primitiveness of the power of our unconscious, which competes with and triumphs over our supposed rationality. In Freud's words: "The ego is not master in its own house."

Magicians have been exploring these illusions and playing with our subconscious for centuries in their tricks, long before scientific documentation. Reality is often more suspicious than we might assume.

It should come as no surprise that the presentation of financial data, by stimulating a disproportionately large reward, tends to manufacture illusions. Sometimes directed and inappropriately motivated, occasionally automatic and innocently absorbed as reliable. Just like spectators at a magic show, we are constantly on the lookout for the discovery of the trick. That cynical pleasure, which overflows with dangerous pseudo-intellectual superiority, should drive us in the laborious task of trying to identify what others casually overlook. After all, this is the primary role of an investment analyst[9].

"HISTORY IS NOT THE PAST, IT IS THE ONGOING PRESENT"[10]

The standardized and audited financial statements we consume today, although often perceived as pure representations of reality, are actually the result of a myriad of conventions. They are the product of a relatively recent dynamic adaptive process.

The foundation of modern accounting, the "double-entry" system - assets on one side and liabilities on the other - was formally described for the first time in late 15th-century Italy, although traces of its application can be found in the accounting of the Chinese empire hundreds of years earlier[11]. This system possibly drew from the philosophical tradition of Taoism, with its recognition of the complementarity and interdependence of seemingly opposing forces (yin and yang), creating a methodology of balance based on this duality: black and white, light and shadow, life and death, assets and liabilities. However, our Eurocentric heritage led us to know it as the "Venetian method."

[8] Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience

[9] It is impossible not to recall the comment of an experienced and prudent analyst who said he believed only in two pieces of information from a balance sheet: the publishing date and the cash balance

[10] Octavio Paz was a Mexican writer and poet who won the Nobel Prize in Literature in 1990

[11] Lin, Z. Jun. "CHINESE DOUBLE-ENTRY BOOKKEEPING BEFORE THE NINETEENTH CENTURY."

Regardless of its origin, this accounting methodology had significant implications for human productivity, especially starting with the industrial revolution. The new industrial barons used the method to locate the difference between fixed and varitem able costs as well as all its implications, thereby contributing to the understanding of economies of scale. Accounting gained a new status, revealing the importance of accuracy, continuity, and periodicity.

As capital came to be held by non-operational agents, accounting took on an informative character of accountability. To attest to the fairness and reliability of the reported numbers, the role of external auditors was introduced in English corporate law from the mid-19th century. In the United States, railroads, relying primarily on third-party capital, were the target of the first recorded external audits in the country[12]. Subsequently, it became common practice to publish results with the opinion of audit committees. The requirement for auditor independence as something fundamental, however, came later. Until 1862, English corporate law[13] even required auditors to be shareholders of the audited companies for alignment purposes.

In this initial phase, both the methodology used in financial statements and the scope and direction of audits were defined according to the preferences of the professionals involved. Standardization was not yet a value to be pursued and encouraged. After the 1929 crisis, with the aim of restoring confidence in the capital markets, the U.S. Congress enacted two acts that changed the country's corporate landscape. The first was the Securities Act of 1933, which, among other measures, created transparency and external oversight obligations for companies involved in issuing securities. Subsequently, the Securities Exchange Act of 1934 created the SEC (Securities and Exchange Commission) and introduced for the first time the concepts of Generally Accepted Auditing Standards and Generally Accepted Accounting Principles, later known by the acronym GAAP[14]. In the decades that followed, US-GAAP was shaped and improved with the influence of the SEC, the AICPA (American Institute of Certified Public[15] Accountants), Congress, and the investment community.

The aftermath of World War II imposed an urgent need for the reconstruction of global order. In order to promote lasting peace and stimulate some degree of cooperation among nations, a coordinated effort was made to create supranational institutions and deepen economic interdependence - the IMF, WTO, World Bank, and OECD were born in this environment. The theory of capitalist peace in action[16]. The harmonization of accounting practices became imperative[17] in the context of growing international trade and foreign investment. The disparity between conventions in Anglo-Saxon countries was relevant[18], but it did not compare to the chasm that existed between the

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[12] An audit conducted by a group of creditors and shareholders of the Reading Rail Road Company. The scope of this investigation went beyond what would be the work of an audit, blending aspects of fixed asset due diligence with requests for guidance on future results, but it is still symptomatic of the potentially conflicting relationship between funding providers and those responsible for execution. [Boockholdt, James L. "A HISTORICAL PERSPECTIVE ON THE AUDITOR'S ROLE: THE EARLY EXPERIENCE OF THE AMERICAN RAILROADS."]

[13] The UK Companies Clauses Consolidation Act of 1845 requires auditors to be shareholders of the audited companies. The UK Companies Act of 1862 no longer requires alignment through investment but still does not require any form of auditor independence

[14] Interestingly, the United States was the only country to establish the body responsible for overseeing adherence to GAAP principles without first defining what those principles would be or who would be responsible for developing them

[15] It is important to clarify that here the concept of "public" has no relationship with state bureaucracy. CPAs are "public" because they must serve the public interest by safeguarding the integrity of the financial system

[16] The theory of capitalist peace postulates that democratic capitalist countries tend to maintain peaceful relations due to their shared economic interests. The Ukraine war and the subsequent vulnerability of the European continent's gas supply were eloquent demonstrations of its practical limits

[17] In 1962, the AICPA organized an international congress to discuss accounting and auditing around the world, and two years later published a study on the subject (Professional Accounting in 25 Countries - 1964)

[18] Just a few illustrative examples: in the UK, companies could revalue their fixed assets, while in the US and Canada historical cost prevailed; In the US, capitalization of interest in construction of fixed assets is mandatory, while in the UK it is optional; R&D expenses can be capitalized under UK GAAP, while under US GAAP they must flow through as an expense in the income statement. In the US, the Last In First Out (LIFO) methodology could be used for inventory

United States and countries where profit taxation guided accounting, such as Japan and parts of Europe. This discrepancy became evident when Daimler-Benz was listed on the NYSE in 1993. By then the largest German company, Daimler, reported a profit for the first half of the year under German GAAP of DM 117 million (U$68M). However, when applying the US GAAP methodology, the same six months of operation would have resulted in a loss of DM 949 million (U$556M). The difference was mainly due to the use of "hidden reserves," a practice allowed for German companies to mitigate results. This episode was so symbolic that it led to the publication of a law[19] allowing the release of financial statements compliant with internationally accepted accounting standards and dispensing with the use of local practices.

The effort to design a global GAAP began in 1973 with the creation of the International Accounting Standards Committee (IASC), later transformed into the IASB, now responsible for maintaining the International Financial Reporting Standards (IFRS). Its success came from decades of joint work with national accounting entities from various countries. It took time to gain the support of standard-setting bodies and market regulators around the world[20]. The organization's crucial moment came in the late 1990s, catalyzed by the European Union's intention to create an integrated financial market. In June 2000, the EU set 2005 as the deadline for all companies listed on regulated markets in Europe (about 7,000 at the time) to present financial statements in accordance with the standards defined by the IASB. In less than 20 years, 145 countries now require public companies to disclose financial statements compliant with IFRS-defined standards.

At the foundation of the IASC in 1973, foreign direct investments represented about 0.5% of the global GDP, a number that exceeded 5% a few years after the adoption of IFRS by the EU. This phenomenon is comparable to the maritime container[21] invented in the 1950s by an American entrepreneur, which revolutionized global logistics through standardization, unifying different modes of transportation. International trade converged from 15% of global GDP in 1960 to nearly 60% today.

At the same time, an obsession with excessive standardization can potentially lead to rigidity that distorts observed results. Companies are living organisms with nuances and peculiarities. In this sense, amid so many methodological discussions stemming from accounting complexity, we should not forget the fundamental fact: companies invest resources with the aim of generating returns above their cost of capital. They generate revenue by selling their products/services, incur operational, financial, and tax costs, and ideally generate enough profit to deal with reinvestment needs to maintain the business. If successful, they can return capital to shareholders or continue to invest. If not, they need to raise new capital through debt or equity. No accounting convention can change that. Accounting, in the end, should be the language that allows us to evaluate whether these objectives are being pursued adequately. From this point forward, we intend to delve into certain specific cases we have recently faced as well as some particular reflections.

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management, while in Canada only some industries had this right (relevant as it reduces the tax burden in inflationary environments)

[19] Kapitalaufnahmeerleichterungsgesetz (KapAEG), law facilitating access to capital

[20] A notable episode occurred in 1974 when the SEC supported an IASC standard related to the consolidation requirement of dissimilar subsidiaries that was in conflict with the interpretation given by US GAAP on the matter. In the end, the IASC recognized that the fight with the FASB (Financial Accounting Standards Board, the successor to the AICPA, responsible for defining US GAAP standards) was not worth it and allowed the exclusion of dissimilar subsidiaries from consolidated financial statements. But it was still a message from the SEC that leadership in defining accounting standards was not limited to the US

[21] "The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger," authored by Marc Levinson

Amortization of Intangible Assets

In 1958 at the Texas Instruments laboratory, Jack Kilby invented the integrated circuit, later nicknamed the microchip, and dramatically changed human history. Kilby's invention marked the beginning of a New Industrial Revolution. A world of atoms transformed into a planet of bits.

In this migration, the main components of new business models ceased to be physical and became digital, assets that are not visible and therefore intangible, but of extreme importance for the construction, sustainability, and growth of companies. It initially encompassed brands, patents and significant acquisitions above book value. In recent years, the focus has shifted to software and research & development, leading to a proliferation of intangible assets.

From an accounting perspective, a non-physical asset that is expected to be consumed over a period longer than the Gregorian calendar should be treated as a long-term asset, with amortization over its estimated useful life minus any residual value. The amortization process is similar to depreciation.

In traditional accounting practice, there is a risk of creating expenses in the Income Statement (IS) that would actually be investments in intangible assets, confusing current profit with investments for future growth. This opens the discussion for the correct accounting treatment of expenses as intangible assets and their subsequent long-term amortization.

We thus sail through turbulent waters and enter a labyrinth surrounding the perennial discussion of two important questions: what constitutes an expense and what constitutes an investment in an intangible asset. Furthermore, what amortization period should be used for the asset.

Imagine the case of an established video game company. It decides to start developing a new game with a research and development period set at five years. A team is designated solely for this development. If the company chooses to categorize these expenses as an expense item, the short-term results are significantly affected. The expenses during this period do not have a compensatory revenue counterpart. The usual option is to recognize the internally built software as an intangible asset on the balance sheet, even if it's just abstract bits, as it produces future benefits for the company. To do this, the asset can be recognized as development costs are incurred without passing through the income statement as ordinary expenses. At the end of the project, as revenues start materializing, this intangible asset is amortized.

However, the decision between capitalizing expenses as intangibles on the balance sheet or recording them as expenses on the income statement is highly subjective and can be evaluated incorrectly or even manipulated if management is misaligned. The trick is intuitive: costs that should be reported as expenses for the incurred period are capitalized as an asset, inflating assets and underreporting costs.

Even traditional companies have been using this artifice. In the two largest private banks in Brazil, the expenses capitalized as intangible software assets in excess of the amortization for the last 12 months already represent about 8% of net profit. Before the pandemic, this line item was at zero. The immediate reflection turns into a discussion of distinguishing between opex and capex. If the expense is recurring for maintaining competitiveness, the cost should not be deferred. It's simply the cost of doing business. It's worth noting that a generic stakeholder, armed with a qualitative approach and a certain dose of irony, might point out that the technology liability of large incumbent banks is probably larger than the asset.

Provision for Doubtful Accounts - IFRS vs. BR GAAP

Accounting standards applied to the financial sector are a clear example of the need for translation between different systems. In particular, the business of lending money illustrates the natural mismatch between the potential value of a transaction, its actual cash flow journey, and its accounting treatment. The moment a bank grants a loan, it becomes essential to determine the probability of default at maturity. This provision involves a variety of assumptions with different levels of complexity. Just as in real estate development accounting[22], the process seeks quantitative support to the fullest extent possible, but a degree of subjectivity remains inherent. It's no wonder that accounting doesn't belong to the academic realm of exact sciences.

The Central Bank of Brazil (BCB), regulator of the banking system, has always supported the convergence of accounting methodologies, requiring the preparation and disclosure of financial statements in accordance with IFRS standards since 2010, through CMN Resolution 3.786/09. However, provisions for doubtful accounts are governed by CMN Resolution No. 2.682/99: potential losses on credit operations must be accounted for with a fixed rule, under which a certain percentage of the debt must be provisioned based on the number of days overdue. It progresses exponentially to provision the entire credit after six months of default. This implies that in the first 60 or 90 days, only a portion of the debt (3% and 10%, respectively) should be provisioned. In contrast, under the IFRS method losses are classified under the concept of expected loss, and the provision is made at the moment the credit is disbursed based on an estimated percentage of loss. Despite seemingly subtle differences, the impact can be substantial.

In rapidly growing companies with relevant credit operations, the effect of IFRS can be significantly more negative. In the first months, the entire loss is recognized but only a percentage of the interest is received. The faster the pace of growth, the higher provisions for doubtful accounts accumulate and reduce accounting profit.

Nubank is a classic example of the impact of different accounting methods. It uses the IFRS methodology since it is headquartered outside Brazil, which creates significant distortions due to its rapid growth. In the last twelve months, Nubank reported expenses with provisions for doubtful accounts of approximately R$7.2 billion within a negligible accounting net profit. If it followed the regulatory accounting used by Brazilian banks, we estimate that the expense would be reduced to R$4.8 billion. Consequently, the profit before taxes would be 10 times higher[23]. The magnitude of the difference is due to Nubank's rapid growth – if the portfolio were growing at a normalized rate, this difference would be less significant. It's important to note that there is no incorrect methodology, only differences in timing and calculation method.

"There is a big difference between creating wealth and reporting income."[24]

EBITDA[25] has been the most widely used metric in the global corporate landscape for decades. In earnings conference calls of S&P 500 companies, it is mentioned three times more often than "revenue" and six times more often than "cash flow," even though it is not an officially recognized indicator under IFRS. Its popularity was led by

[22] The Percentage of Completion (POC) method is an accounting technique used in real estate construction to recognize revenue and profit as the project progresses. It relies on subjective estimates of the expected total cost of the project

[23] While the IFRS methodology is excessively strict, provisioning at the minimum defined by the central bank seems too lenient for companies that are growing. Something between the two methodologies would probably be more accurate. Large incumbent banks balance some of this effect by making additional provisions, bringing the minimum expected provisions according to the central bank methodology closer to management's actual expectations

[24] John Malone

[25] Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)

John Malone, the CEO of the American cable TV conglomerate TCI, a business that resembled a collection of regional monopolies. The high investments required to cable a city became a barrier to entry for potential competitors and customers rarely canceled their subscriptions. Voilà – a revenue stream with high predictability was created. Additionally, with a significant portion of the operating cost focused on content acquisition, Malone realized that scale would improve his negotiating position and thus his margins. He pursued an aggressive consolidation plan through leveraged acquisitions in non-recourse structures. Part of the strategy was to take advantage of the discrepancy between high accounting depreciation and low economic depreciation, thus eliminating accounting profit and reducing tax payments. It was said at the time, half-jokingly and half-seriously, that if a large profit were ever reported, Malone would fire the accountants[26].

In this specific case, the strategy of highlighting EBITDA became evident. Accounting depreciation differed from economic depreciation, implying a small investment for business maintenance. Even though commitments to creditors drained all the generated EBITDA, growth added value through increased bargaining power and subsequent margin gain. In this context, accounting losses combined with expansion investments should not frighten creditors.

However, the proliferation of EBITDA as a proxy for cash generation made the indicator the star of a parallel accounting standard[27]. The failures of its simplistic usage accumulated over time. Few businesses avoid reinvesting at least to replace the wear and tear of their fixed assets. In inflationary environments, this may be greater than linear accounting depreciation. Furthermore, it's important to remember that the maintenance that matters to long-term investors is not that of physical assets but rather the ability to generate cash. More competitive environments may require more reinvestment than reflected in financial statements. You have to run faster to stay in the same place.

IFRS 16, effective from 2019 onwards, potentially makes the EBITDA metric even more harmful. Leases are now recognized on the balance sheet as a right-of-use asset on one side and a lease liability on the other. In the income statement, operating expenses are replaced by financial expenses and the depreciation of the right-of-use asset, inflating EBITDA and reducing its correlation with the company's actual cash generation capacity[28].

Entropy, or the Magic of Common Sense

Mathematician Claude Shannon, in his seminal article "A Mathematical Theory of Communication"[29] applies the concept of entropy[30] to the theory of communication. In simplified terms, he postulates that the less predictability a system has, the higher its entropy. In other words, the lower the entropy of a message, the fewer questions are needed to clarify the issue. Translating this concept into accounting, it is appropriate to correlate the entropy of financial statements with the effort to determine actual cash generation—how many questions a diligent analyst needs to ask the company to reconcile the change in net debt. Several factors can influence this process, such as the executives' incentives, the quality of controls implemented in the organization, the availability of information, and the inherent complexity of the business itself. Sometimes we cannot know exactly where the problem lies but we can perceive the high level of entropy in the system, which naturally reduces our appetite as investors. Over time, various methodologies have been used to try to identify such situations.

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[26] "Cable Cowboy: John Malone And The Rise Of The Modern Cable-Tv Business."
[27] Skeptics have nicknamed it "bullshit earnings" - https://bit.ly/bs_earnings
[28] The tempting simplicity of the metric reminds us of Oscar Wilde's quote, "The truth is rarely pure and never simple."
[29] https://bit.ly/shannon_paper
[30] A physical concept applied to thermodynamics that represents the degree of randomness or disorder in a system

In the 1930s, a physicist at the General Electric research center noticed more wear and tear on the first pages of the logarithm table used in the laboratory. The deterioration caused by the scientists' fingers while flipping through the pages seemed noticeably greater on numbers starting with 1 and 2 than on 8 or 9. This eureka moment encouraged Frank Benford to begin an empirical study of the hypothesis. From that moment on, he collected series of numbers as diverse as river areas, population data, physical constants, and random numbers printed in newspapers to demonstrate in his paper "The Law of Anomalous Numbers"[31] that the first digits followed a logarithmic distribution. Numbers starting with 1 appear about 30% of the time, with 2, 18%, until reaching the solitary 9 with only 5%. Benford's Law was created. Decades later, its application to financial statements was introduced. Although far from being a conclusive test, it acts as a fraud detector because it is unlikely that a fraudster has the necessary talent to create illegitimate financial statements while adhering to the mathematical law.

This test became known for its ability, after the fact, to identify the accounting flaws of Enron. However, calculating the distribution of the first digits of the entire universe of Brazilian publicly traded companies in recent years makes it difficult to draw any practical conclusions[32]. The number of false positives seems sufficient to invalidate the exercise. Sometimes where there is smoke, there is just a good barbecue.

EPILOGUE

The writer João Ubaldo Ribeiro liked to make fun of his most famous book, "Viva o Povo Brasileiro" (Long Live the Brazilian People). When he released it, he said he was finally fulfilling a request from his strict father, an intellectual from Bahia: to deliver a thick book, one of those that stands upright on the shelf. The history of Brazil from that epic of common people approached 700 pages.

Brazilian financial statements and their appendices are hefty. The amount of information in income statements and explanatory notes is significantly higher compared to more mature markets. For the more attentive, it serves as a reference for deep investigations into the money trail. For distracted analysts, at the very least they serve to prop up monitors at eye level.

Unfortunately, there is no proportionality between the amount of information and the alignment between financial statements and actual cash generation. Looking at past data, we are struck by the dispersion in the Brazilian market between the numbers reported by companies in their releases and even in their income statements, and variations in their net debt. The quantity of provisions and reversals, the aggressiveness in depreciation and amortizations, disturb the measurement of cash generation. The notable "Other" account on the balance sheet, formerly part of traditional working capital, continues to act like a magnetic cash drain. We are impressed by the historically lower correlation between EBITDA and actual cash generation, even when adjusted for expansion investments, among Brazilian companies compared to American counterparts.

The quality of accounting profit in our market requires careful reading of financial statements and the need for periodic interaction with management to understand the nuances and adjustments. The task of translating this complex language into reality is imperative for survival. An appropriate financial report should assist and enable the

[31] https://bit.ly/benford_paper

[32] It's interesting to notice, for example, how the numbers of energy transmission companies do not follow Benford's Law - a result of applying the IFRS methodology that distances accounting from actual cash flow. Due to the nature of the business, investments are treated as a financial asset subject to amortization at a pre-estimated rate of return, with the initial capex being classified as construction revenue.

analyst to work and map what Americans call "follow the money." In this case, it is not enough to merely satisfy the aesthetics of standing upright on the shelf.